



Indiana Utility Regulatory Commission

2005 Telephone Report to the Regulatory Flexibility Committee of the Indiana General Assembly

Table of Contents

1.0	The State of Competition	1
2.0	Broadband Deployment Continues	12
3.0	Rural ILECs Continue to Evolve	17
4.0	Uncertainty in Federal Regulations	20
5.0	Consumer Issues are at the Forefront of IURC Activities	23
	<u>Acknowledgements</u>	32
	<u>Appendix 1: Rural ILEC Profile</u>	33
	<u>List of Acronyms</u>	34
	<u>Charts</u>	
	Chart 1: Methods Used by CLECs to Provide Service to End Users as of 12/31/04	3
	Chart 2: CLEC Methods of Serving Customers Using ILEC Services or Facilities From 2002 to 2004	4
	Chart 3: CLEC Access Line Market Share as of 12/31/04	8
	Chart 4: CLEC Access Line Market Share as of 12/31/04 (Assuming Approval of Pending Mergers)	8
	Chart 5: Consumer Affairs Complaints in 2004	30
	<u>Maps</u>	
	Map 1: Indiana Access Lines Provided by CLECs as of 12/31/04	5
	Map 2: Indiana Rate Centers Where Local Telephone Service Providers are Providing at Least 1 Broadband Line as of 12/31/04	14
	Map 3: Indiana Wireless E-911 Phase I	27
	Map 4: Indiana Wireless E-911 Phase II	28
	<u>Tables</u>	
	Table 1: Summary of Indiana Wireline Competition Data	2
	Table 2: Area Code Life Projections	24

1.0 The State of Competition

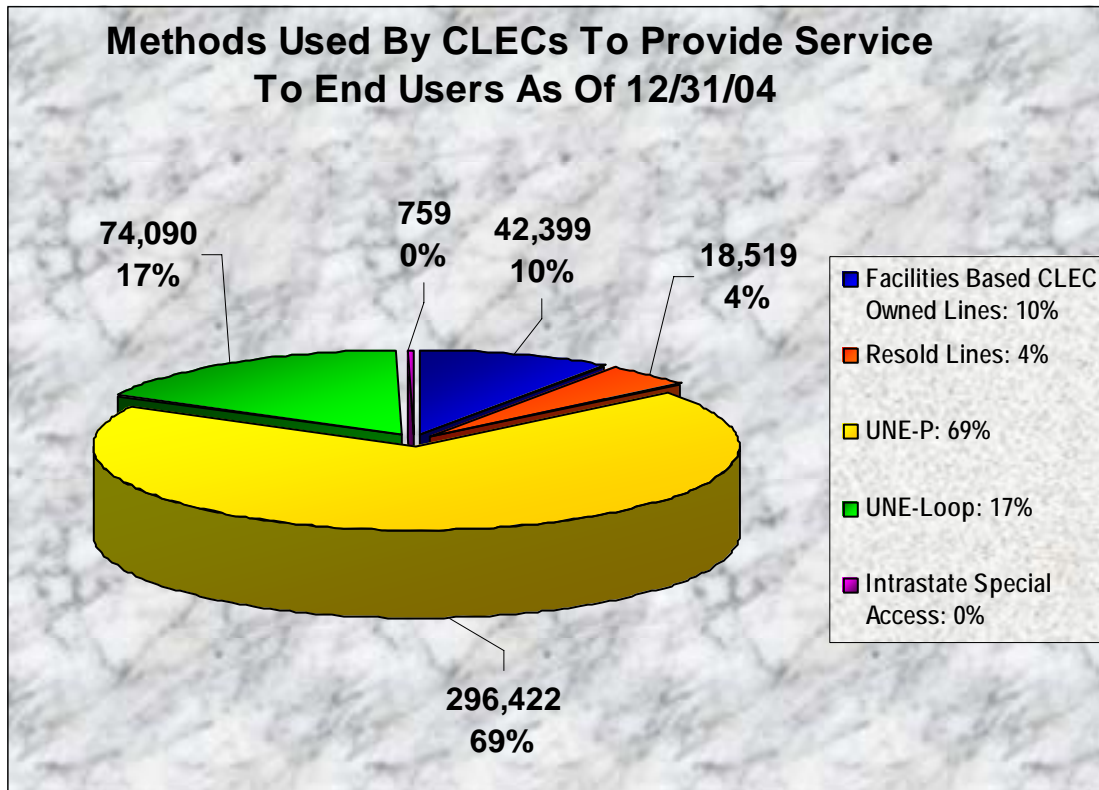
In future years we may look back on the events of the past 12 months as extremely significant in the evolution of competition. The proposed national mergers of Sprint/Nextel (approved on August 8, 2005), SBC/AT&T, and Verizon/MCI have the potential to alter the competitive landscape of telecommunications for Indiana. In addition, key actions by the Federal Communications Commission (FCC), including the recent policy lifting the FCC requirement that Incumbent Local Exchange Carriers (ILECs) offer mass market switching to Competitive Local Exchange Carriers (CLECs), could have a significant impact. Although the complete effects of these events will become evident over time, the IURC will continue to report and monitor the level of competition through our local competition survey. Another major competitive issue is the degree to which alternative services such as wireless and Voice over Internet Protocol (VoIP) are becoming true substitutes for traditional wireline services.

The Level of CLEC Competition has Increased Slightly

For over a decade the IURC has monitored data and industry trends in Indiana to report the effects of competition to the Regulatory Flexibility Committee. Table 1 on the following page reports the number of lines and the share of the relevant markets of both incumbents and competitive providers. The data reveals several new trends. Following a trend of declining growth the past three years, for the first time ILECs report a 5.6% decrease in total lines. However, ILECs maintain an overwhelming share of the wireline marketplace compared to the competitive carriers. At the end of 2004, CLECs had 582,000 lines in service, or a 13.4% share of the wireline market, an increase of only one percent from 2003. But for the first time CLECs lost residential lines and the ILEC percent share of residential lines increased, from 88.4% to 88.5%. This is likely due to three major factors. First, some carriers are no longer accepting orders for new customers. Second, certain ILECs have an aggressive campaign to obtain customers once lost to CLECs through "Winback" promotions. Third, ILECs are offering bundles of local, toll, broadband, and wireless, etc. Despite the loss of residential lines, CLECs maintained a small positive growth rate in total access lines, 2.1%, due to an increase in business lines. In 2004, as in previous years, CLECs only provided service in the territories of the three large ILECs (SBC, Verizon, and Sprint).

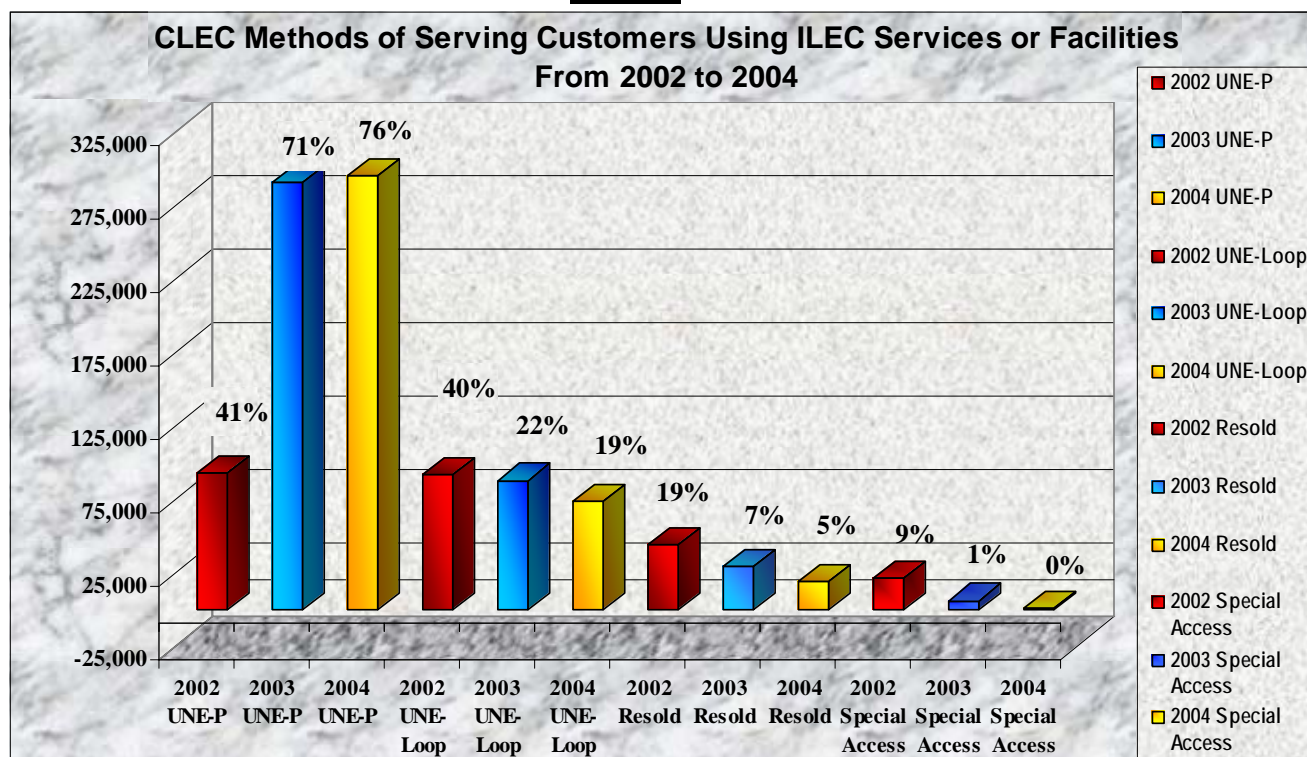
Table 1: Summary of Indiana Wireline Competition Data

Highlights	2004	2003	2002	2001
ILEC Share of Wireline Services Statewide	86.6%	87.6%	91.6%	94.1%
CLEC Share of Wireline Services Statewide	13.4%	12.4%	8.4%	5.9%
ILEC Wirelines in Service	3,755,000	3,979,000	3,910,000	3,821,000
CLEC Wirelines in Service	582,000	563,000	357,000	241,000
Total Wirelines in Service	4,347,000	4,542,000	4,267,000	4,062,000
Wireless Subscribers	not available	2,643,000	2,356,000	1,897,000
Statewide ILEC Residential Lines	2,306,000	2,424,000	2,364,000	2,510,000
Statewide ILEC % Share (Residential Lines)	88.5%	88.4%	94.1%	98.0%
Statewide CLEC Residential Lines	299,000	319,000	149,000	50,000
Statewide CLEC % Share (Residential Lines)	11.5%	11.6%	5.9%	2.0%
Statewide ILEC Business Lines	1,450,000	1,555,000	1,546,000	1,311,000
Statewide ILEC % Share (Business Lines)	83.6%	86.4%	88.1%	87.3%
Statewide CLEC Business Lines	283,000	244,000	208,000	191,000
Statewide CLEC % Share (Business Lines)	16.4%	13.6%	11.9%	12.7%
Statewide Wireline Growth Rate	(4.7)%	6.4%	5.0%	4.3%
ILEC Wireline Growth Rate	(5.6)%	1.8%	2.3%	3.5%
CLEC Wireline Growth Rate	2.1%	57.7%	48.1%	18.7%
ILECs in Indiana	41	41	41	41
CLECs Responding to Survey	65	79	53	40

Chart 1

One of the most important issues faced by CLECs in the upcoming year will likely be how to deal with the elimination of Unbundled Network Elements–Platform (UNE-P). Chart 1 shows methods used by CLECs to deliver services in 2004. CLECs serve customers through five methods, each described below with the respective share of the market.

1. UNE-P was the preferred method, at 69%. With UNE-P a CLEC can lease all the elements necessary to provide services at Total Element Long-Run Incremental Costs (TELRIC), a cost methodology created by the FCC that results in low UNE rates. UNE-P requires no CLEC owned facilities, and permits the CLEC to collect long distance access revenues and reciprocal compensation.
2. UNE-Loop, also known as unbundled local loops, is the second most frequently used method and accounts for 17% of the market. With UNE-Loop, CLECs only lease the last-mile connection and use their own switching and transport. It is difficult for CLECs to replicate the local loop for the vast majority of residential and business customers.
3. Facilities-Based is the third most frequently used method, at 10%. Here, the CLEC owns all the facilities, and the ILEC and CLEC merely interconnect and exchange traffic.
4. Resold lines account for 4% of the CLEC's service. Resellers obtain an entire service, such as Basic Local Service, from the ILEC at a retail discount (between 20% and 25%) and "resell" the service.

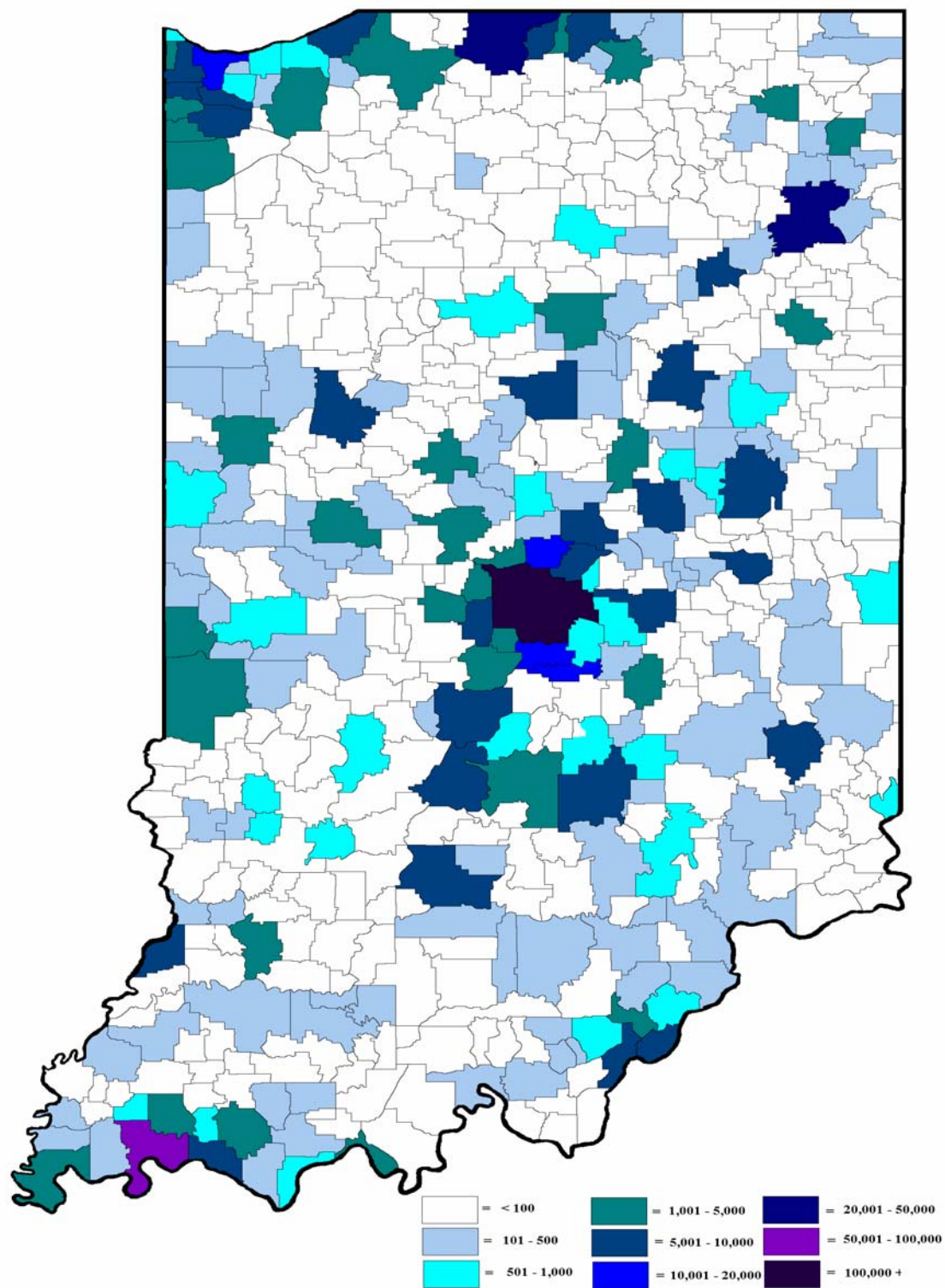
Chart 2

5. "Special Access" circuits (less than 1%) are used when the CLEC orders a high capacity line from the ILEC to connect the customer to the CLEC.

Chart 2 shows the trend from 2002-2004 in methods used by CLECs to serve customers using ILEC services or facilities. In 2004 UNE-P accounted for 76% of the total CLEC lines leased, an increase of five percent from 2003. UNE-Loop is now down to 19% from 22% and Resold lines accounts for only five percent of the market. Intrastate special access has fallen to less than one percent of the market. Many companies who used special access to serve customers are now using a UNE element called Enhanced Extended Loops (EELs), which is a combination of a UNE-loop and transport. In this case the CLEC has a switching device that moves calls from one area to another.

Map 1 on the next page shows the geographic dispersion of access lines provided by CLECs. As expected, the metropolitan areas of Indianapolis, Evansville, South Bend, and Fort Wayne are the top four exchanges with Gary, Carmel, Hammond, and Greenwood rounding out exchanges with over 10,000 CLEC access lines. As the Map indicates, many of the rural exchanges have less than 100 CLEC access lines.

Map 1
Indiana Access Lines
Provided By CLECs
as of 12/31/04



Future Actions that May Impact Competition

Elimination of UNE-P Forces CLECs to Develop Different Strategies

In the spring of 2004 the Federal Communications Commission released its Triennial Review Order (TRO), which included the latest list of Unbundled Network Elements (UNEs) required (and not required) to be provided by ILECs, such as SBC. However, by early summer of 2004 the TRO had been overturned by the federal appeals court and remanded back to the FCC for reconsideration of a number of issues. One important issue remanded back to the FCC was the appropriateness of continued availability of UNE-P, which, as the data indicates, is the most prevalent form of CLEC competition. The appeals court found that the FCC had inappropriately delegated to the states the determination of the geographic area in which ILECs would be required to provide UNE-P service. In early 2005, the FCC released its Triennial Review Remand Order (TRRO) addressing the issues remanded by the appeals court.

The FCC determined in the TRRO that ILECs would no longer have to provide unbundled local switching, which has been used by competitors to serve small business and residential customers, at regulated prices. The FCC found that there are viable alternative sources for local switching functionality: both other non-ILEC wholesale providers and self provisioning. However, the FCC included a transition time-frame to allow for CLECs to make alternative arrangements or come to commercial terms to purchase continued access to this functionality. The FCC has determined that ILECs have an obligation to continue to provide unbundled switching at regulated prices to any customers in existence prior to the effective date of the TRRO. This continuing obligation to provide unbundled switching includes adding or removing of features such as Caller ID and instances when an existing customer moves to a new location.

The IURC has two Causes specifically related to the TRRO order: Cause Nos. 42749 and 42857. In Cause No. 42749 SBC Indiana filed a complaint against certain CLECs asking that the Commission both (1) approve its proposed amendment language and (2) order that such amendment be implemented by all parties as part of their interconnection agreement by November 15, 2004. SBC Indiana further stated that the relief was necessary to make the agreements consistent with the TRRO, the FCC's Interim Order, and in anticipation of the FCC's post USTA II unbundling rules. The parties have had on-going negotiations relating to these issues and recently have informed the Commission that they believe that an investigation should be established to better address, from a procedural standpoint, the remaining TRRO issues. The parties also argued that the Commission should consider that several other states are currently engaged in similar proceedings which in all likelihood will impact the overall outcome in Indiana. In consideration of these issues and in response to the parties' requests, the Commission has announced that it will be holding Cause No. 42749 in abeyance, while proceeding with a new investigation, Cause No. 42857, to deal with the implementation of the TRRO and the remaining portions of the TRO. On July 26, 2005, in Cause No. 42857, parties filed a Joint Disputed Issues List that contained 31 issues.

In the face of the elimination of UNE-P, companies have taken different strategies. For example, where companies have a large number of customers in a concentrated area, they may buy a switching device and move customers off UNE-P to a UNE-L strategy.¹ Other companies have signed agreements to replace UNE-P, but maintain UNE-P-like services. Some CLECs that have local switches deployed are offering to be wholesale providers to CLECs looking to remain in business but who do not want to build facilities or lease UNE-P-like services from

¹ For example, Talk America which serves about 250,000 customers (nationwide) has installed a switch in Detroit, MI.

SBC. Finally, other companies are no longer taking orders for new residential customers or have left the market completely. In fact, we have already begun to see a drop in the total number of CLECs from 79 to 65. Until these different strategies play out, we cannot predict how the elimination of UNE-P will effect competition.

The Impact of the Mega Telecommunications Mergers are Unknown

If approved the telecommunications industry will likely be transformed by two proposed mega mergers consummating this year or next year: SBC-AT&T and Verizon-MCI.² Continuing its ten year trend of acquiring companies, SBC is acquiring AT&T. After a long fight with Qwest, MCI has agreed to be acquired by Verizon. These mergers represent the first vertical integration of a regional Bell Operating Company (RBOC) and a traditional long-distance company. At this time, the mergers have not been approved by various regulatory agencies such as the FCC, Department of Justice, and state PUCs.³ Proponents of the two mega-mergers claim the public will benefit from creation of a larger company with global reach and the combined company will increase innovation and investment across the country. Preliminary analysis shows the mergers will yield revenue increases and significant cost reductions. Parties opposing the mergers argue that they will create a duopoly and eliminate competitors. Opposing parties also argue the two large companies will have a strong incentive to refrain from competing in the other's dominant regions.

While the IURC does not have jurisdiction over the mergers, we will keep abreast of the activities associated with these two mergers.⁴ We note that in SBC's previous merger with Ameritech and GTE's merger with Bell Atlantic, the FCC and the companies agreed to many merger conditions. To comment regarding any possible merger conditions resulting from these mergers would be speculative and premature.

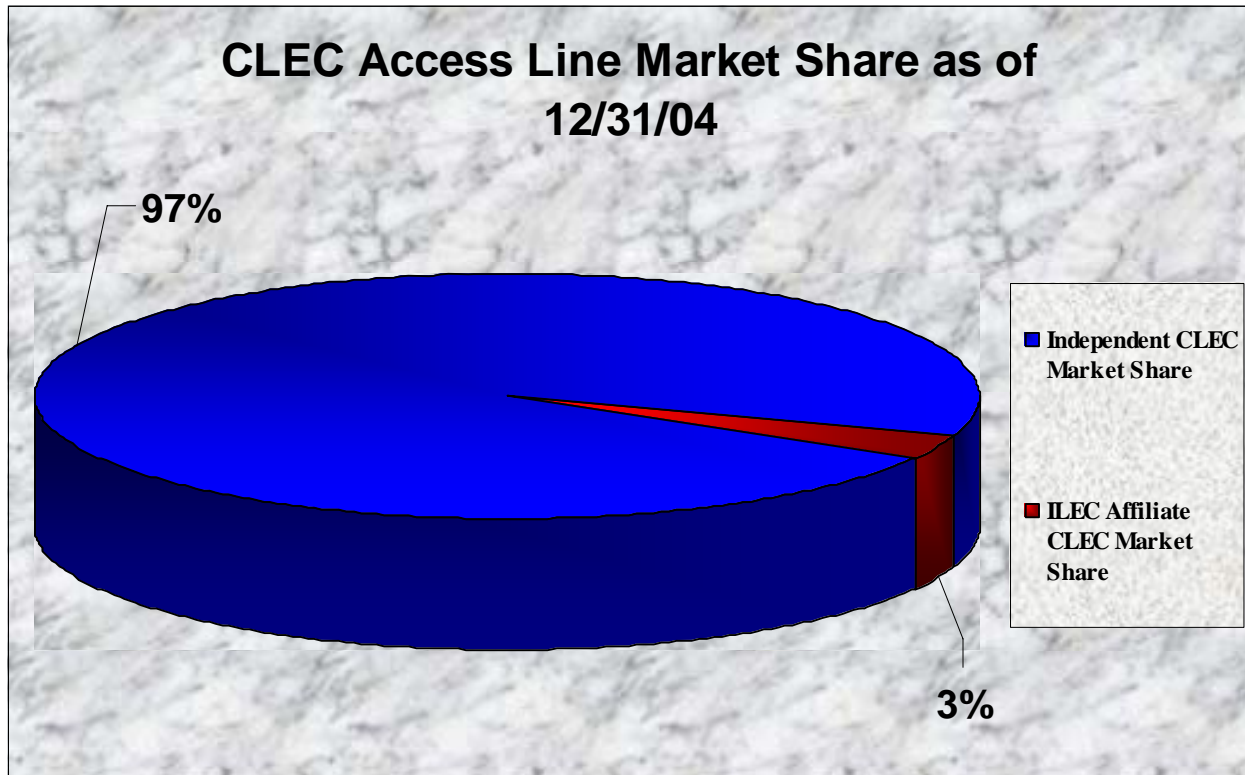
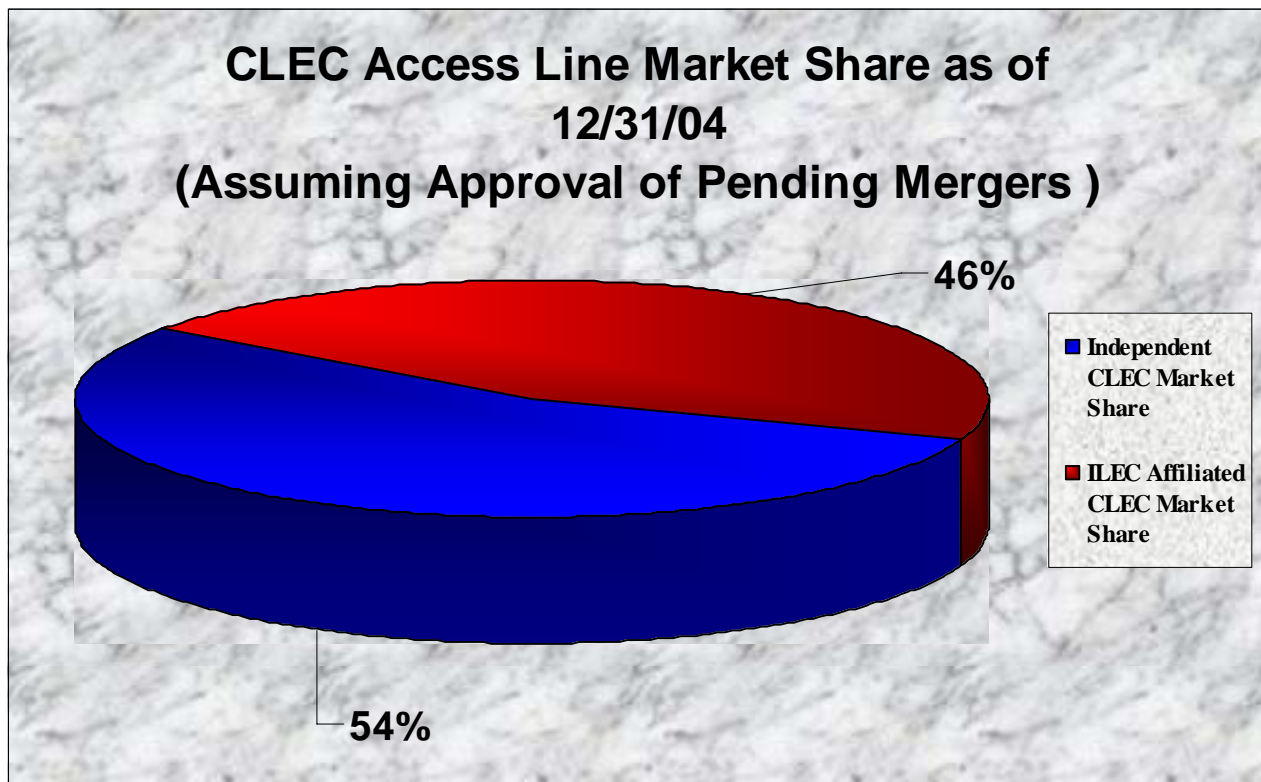
However, we make two general comments. First, MCI and AT&T have been active participants in many dockets related to competition. For example, both MCI and AT&T filed extensive testimony in all of SBC's UNE cost cases and many CLECs adopted the interconnection agreement between SBC and AT&T. Second, Charts 3 and 4 show that after all the mergers, access line share for independent CLECs in Indiana drops to 54% from 97%.⁵

² Other companies in Indiana are also involved in mergers or acquisitions. The Sprint-Nextel merger largely effects the wireless market, but the result of the merger is to spin-off Sprint's local subsidiary into a separate entity trading as a separate stock. The IURC anticipates no significant changes to Sprint's service in Indiana and Sprint will continue to adhere to their Alternative Regulatory Plan. On August 8, 2005, the FCC approved the Sprint-Nextel Merger. To allay concerns about the financial state of the local company, the CEOs of Sprint and Nextel made commitments that the new local wireline company will receive an equitable debt and asset allocation at the time of its proposed spin-off so that the company will be a financially secure, Fortune 500 company. Century-Tel, a holding company for two rural ILECs, recently acquired the CLEC KMC III.

³ The New Jersey Board of Utilities recently approved the SBC/AT&T merger.

⁴ The state Supreme Court has ruled that the IURC does not have authority over mergers or acquisitions between holding companies.

⁵ Data also includes the Sprint-Nextel merger and Century-Tel's acquisition of KMC III.

Chart 3**Chart 4**

Alternatives to Wireline Service

Wireless Services are Still Not Viewed as Complete Substitutes

For the past several years the issues of wireless substitutability has been addressed in this report. Again, as in the past, we believe that wireless service is not a complete substitute for a sufficient number of customers to be an effective restraint against companies raising rates for local service.⁶ Last year the FCC reported data from the Census Bureau that indicated only six percent of customers have completely abandoned their wireline service.⁷ The FCC stated that “while a small proportion of consumers have chosen to cut the cord, inter-modal competition is growing and wireless services may become a more significant direct competitor to wireline services for a larger portion of the mass market in the future.”⁸ However, the Wall Street Journal recently reported the rate of customers who no longer subscribe to wireline service is slowing down.⁹

Other evidence from rural ILECs (ILECs other than SBC, Verizon, and Sprint) supports this lack of complete substitutability. For example, the National Telephone Cooperative Association, which represents telephone cooperatives, reported on a survey taken in January 2005 that take rates for wireline-to-wireless Local Number Portability (LNP), range from 0.04% for respondents serving more than 20,000 lines to 0.01% for those serving 1,000 or fewer lines. Furthermore, despite claims from rural ILECs that wireless competition is affecting their business, the IURC has been presented with no specific data on wireless substitutability in formal docketed proceedings where a rural ILEC has petitioned to be exempt from IURC jurisdiction for rates, charges, and financing under IC 8-1-2-88.5. However, the IURC has granted Eligible Telecommunications Carrier (ETC) status for wireless carriers to serve exchanges of rural ILECs.

VoIP Continues to Grow

Voice over Internet Protocol (VoIP) continues to make strides as an alternative to traditional wireline service. Vonage, the current dominant VoIP company, has approximately 620,000 paying customers and is growing, and companies like Skype have millions of non-paying registered users.¹⁰ Traditional telephone companies like SBC and Verizon are now providing VoIP along with cable companies such as Comcast and Time-Warner. One of the main drawbacks of VoIP is the lack of E911 service; however, this shortcoming is being addressed by Vonage and the traditional wireline carriers. Furthermore, the FCC has mandated E911 coverage of certain interconnected VoIP providers (See Section 5.0 for more detail). As more customers obtain broadband connections and more users get comfortable with the new technology, the IURC sees VoIP as a viable substitute to traditional wireline service. However, for customers using a DSL connection, VoIP will only be a substitute if companies offer “naked” DSL, which is the ability to purchase the DSL line without subscribing to traditional voice service. Without naked DSL the customer is required to purchase the traditional wireline phone service along with VoIP. A more detailed discussion of VoIP is included in Section 2.0.

⁶ We do note that the three large ILECs have Alternative Regulatory Plans that cap rates for basic local service.

⁷ *In the matter of Applications of AT&T Wireless Services, Inc. and Cingular Wireless Corporation For Consent to Transfer Control of Licenses and Authorizations* WT Docket No. 04-70 FCC 04-255 (Released October 26, 2004).

⁸ *Id.*, para. 241.

⁹ *Cutting the Phone Cord Isn't as Popular as Once Predicted*, *WSJ*, June 2, 2005.

¹⁰ Some VoIP products have not had this type of success. For example, AT&T's VoIP product called CallVantage has not yet gained widespread popularity.

Interconnection Issues Continue

The hallmark of TA-96 was bringing competition to the local exchange market. TA-96 emphasized the role of interconnection agreements as the preferred method for an ILEC and a CLEC to work out the details of interconnection including rates, terms, and conditions. When the two parties cannot resolve their differences, they turn to state commissions. This past year the IURC was involved in four arbitrations. The specific cases and major issues are discussed below.

Arbitrations

The IURC was involved in four arbitrations this past year, two of which have been completed. On June 1, 2004, Level 3 and SBC filed for arbitration in Cause No. 42663-INT-01, to resolve close to eighty issues, but the case was eventually settled by parties after the Commission issued an Order. On March 9, 2005, FBN filed for arbitration against SBC in Cause No. 42803, but quickly filed for Voluntary Dismissal. On July 16, 2004, AT&T filed for arbitration with SBC in Cause No. 40571-INT-04 to resolve issues dealing primarily with the need to incorporate recent changes in federal law. Although extensive testimony had been submitted by the parties in late 2004, in light of the FCC's TRRO, the issuance of an Order has been delayed, at the parties' mutual request, so that they may continue to negotiate. On August 4, 2005 SBC filed for arbitration with MCI in Cause No. 42893-INT-01. The arbitration includes over 40 disputes covering primarily collocation, unbundled network elements related to the TRRO, and pricing. Pursuant to TA-96 the IURC must issue an Order on or before January 11, 2006.

Wholesale Cost Issues

On March 30, 2005, the IURC issued an Order in Verizon's latest cost docket, Cause No. 40618-S1 Phase II. In the Order the IURC determined that insufficient information was submitted for the Commission to make a determination whether the costs for Operational Support Systems were recoverable. The IURC gave Verizon the option of submitting a new cost study in another docket. This case is on appeal.

Even though the IURC issued an Order to increase some of SBC's UNE rates in January 2004, some CLECs have not negotiated an amendment to an interconnection agreement to implement these new rates. In January 2005, SBC filed a complaint in Cause No. 42773 against these companies. Since the complaint, many of the companies have reached an agreement with SBC and to date there are only two CLECs in the case. The Evidentiary Hearing was held in June and the Commission expects to issue an Order this fall.

Potential Interconnection Issue – Blocking Traffic

Although the IURC has not seen a complaint case involving the deliberate blocking of traffic, we believe it is an important issue because the value of any network is related to the number of customers who can connect to that network.¹¹ Furthermore, customers making and receiving the call do not know the call is being intentionally blocked and blame the equipment of the service provider. This is most dangerous for newer technologies like VoIP, which in the past has had a reputation of poor service quality, especially where customers are accustomed to reliability of networks in the traditional wireline network. The potential diminution in the value of the network and the FCC's support of newer technologies were primary reasons why the FCC acted so quickly in resolving a dispute from a VoIP carrier and a small ILEC who was blocking its calls. In less than one month the FCC and Madison River Telephone Co. LLC agreed to a

¹¹ One view is Metcalfe's Law, where the value of the network grows with the square of its users. For example, a network of five users has a value of 25 whereas a network of 50 users has a value of 2500. Another view is the value of network grows logarithmically to its users.

consent decree whereby the company agreed to a voluntary payment of \$15,000 and agreed to no longer block VoIP calls.¹² The IURC believes IC 8-1-2-5 provides sufficient authority and flexibility to prevent blocking of any calls to customers of local exchange carriers since this blocking may be injurious to owners or users or detrimental to the service rendered.

The IURC has an Open Docket Related to Certain Marketing Practices

On October 29, 2003, the Commission opened an investigation in Cause No. 42530 “to consider developing appropriate regulatory guidelines for the telecommunications industry”, including, but not necessarily limited to customer specific offerings (CSOs), “Winbacks”, promotions, and bundling of services. The Commission, with input from the parties, set the scope of the proceeding by compiling a list of issues on which the parties would comment. An Order is expected late this year.

¹² *In the Matter of Madison River Communications, LLC and Affiliated Companies*, File No. EB-051H-0110.

2.0 Broadband Deployment Continues

Strong economic development is critical to the growth of Indiana. Economic development in Indiana depends in large part on having a modern infrastructure, particularly in communications technology. Communications technology and applications are part of a fundamental shift in infrastructure which must occur to enhance the underlying economic foundation and connection choices available to the public. Indiana citizens must have access to a modern communications infrastructure, which produces low cost services, to remain competitive with other states and attract and maintain businesses. Indiana has made significant progress on broadband deployment. With continued rollout of broadband including alternatives to cable modems and Digital Subscriber Line (DSL) such as Broadband over Power Lines (BPL), wireless, and satellite, we may achieve the goal of statewide high speed internet by 2007.¹³

High Speed Connection Options Expand

Until recently the majority of consumers reached the Internet through dial-up services, but recent news reports indicate that more than 53% of the nation's internet connections are high speed or broadband connections.¹⁴ In this section we comment on the different types of broadband deployed in Indiana based on the FCC's Broadband Survey, our own Broadband Survey, and data gathered from compliance reports for the three large ILECs Alternative Regulatory Plans.^{15, 16} Today, Indiana is 23rd in the number of high speed lines,¹⁷ 17th of the 43 states with fiber to the home communities,¹⁸ and we have three cities in the top 100 cities with WiFi connectivity.¹⁹

1. Fiber Optics

Fiber to the Home or Premise (FTTH or FTTP) is the most promising broadband technology. Unlike today, where most people have copper wire from the central office to their home or business, as the title indicates this technology brings fiber optics directly to the customer's location. According to research associated with the "U.S. Optical Fiber Communities", FTTH installations have grown by 83% since October 2004, now reaching 398 communities in 43 states.

Indiana has a number of FTTH projects. For example, Verizon is deploying their FiOS network in Ft. Wayne and will deploy 6.5 million feet of fiber optic cable at a cost of \$65 million. In addition, while SBC's specific Indiana plans are not known, SBC is planning to pass 18 million households nationally with fiber by 2007. Besides Verizon's and SBC's efforts, ILECs in rural communities are deploying fiber to the home. Eight communities were recently mentioned in a report on fiber deployment.²⁰ These were mostly new subdivisions except for the cities of

¹³ Governor Mitch Daniels' "2005 Agenda for an Indiana Comeback".

¹⁴ IT Facts at www.itfacts.biz

¹⁵ One issue that is continuing to raise controversy is who should provision broadband: a public entity (city or state) or private entity. The public entities state that they are providing the service because the private providers of the services are not meeting the needs of their citizens. The private broadband providers claim that the public entities should not be using tax dollars to compete with them.

¹⁶ Another state agency is working on a comprehensive broadband survey due out later this year.

¹⁷ FCC data on high speed Internet access, December 2004.

¹⁸ The "U.S. Optical Fiber Communities" list was introduced during a press conference sponsored by Senators Charles Schumer (D-NY) and Gordon Smith (R-OR) on May 10, 2005.

¹⁹ Survey by Intel Corporation

²⁰ The "U.S. Optical Fiber Communities" list was introduced during a press conference sponsored by Senators Charles Schumer (D-NY) and Gordon Smith (R-OR) on May 10, 2005.

Rochester and Greensburg, which were overlays of the present copper wires. In all eight communities, the deployment of fiber was by rural ILECs.

2. Cable Modems and Digital Subscriber Line Service

In lieu of fiber, Indiana residents have two additional wireline broadband choices: cable and Digital Subscriber Line (DSL). The IURC does not collect data on cable broadband penetration; however, cable companies provide nationally approximately 60% of the high speed connections today.²¹

Telephone companies are rapidly deploying DSL to remain competitive with cable companies.²² The data from our broadband survey was not complete, but based on estimates from Alternative Regulatory Plans, we believe DSL penetration for the large ILECs (SBC, Verizon, and Sprint) is 71%, well above their implementation schedules. The rural ILECs are also providing their customers with access to broadband service, predominantly by DSL service. Based on our survey, 74% of their customers have access to broadband service.

As Map 2 on the next page shows, most rate centers (commonly called exchanges) in the state have at least one broadband connection to an end user using wireline telephone service from an ILEC or CLEC.²³ This does not imply everyone in the rate center has access to broadband; it only means at least one customer in the rate center has access to broadband. As expected, the rate centers that do not have at least one wireline broadband line are exchanges with less than 5,000 access lines.

3. Wireless Networks

Wireless broadband services potentially offer an economically feasible way to deliver broadband to smaller communities and to the mobile user. Wireless Internet Service Providers (WISPs) and other providers are gaining subscribers throughout Indiana by offering service using fixed wireless broadband (FWB) technologies. Today, wireless broadband is the third most popular method of providing broadband access. Two popular versions of wireless broadband, wireless fidelity (Wi-Fi) and wireless microwave access (Wi-Max) will expand throughout Indiana as standards, reliability, and coverage capabilities continue to improve. Municipalities such as Indianapolis, Scottsburg, Westfield and Evansville have already turned to wireless networks to meet the demand for high speed services. In fact, Indianapolis (65th), Gary (92nd) and Fort Wayne (93rd) are listed among the top 100 cities in the country in WiFi deployment in a survey sponsored by Intel Corporation. Similarly, hotels, restaurants, coffee shops, airports and universities such as Ball State University and Indiana University are extending wireless high speed connectivity options to meet the needs of the mobile users.

²¹ *Bells Are Catching Up in Battle for Broadband*, *The New York Times*, July 28, 2004.

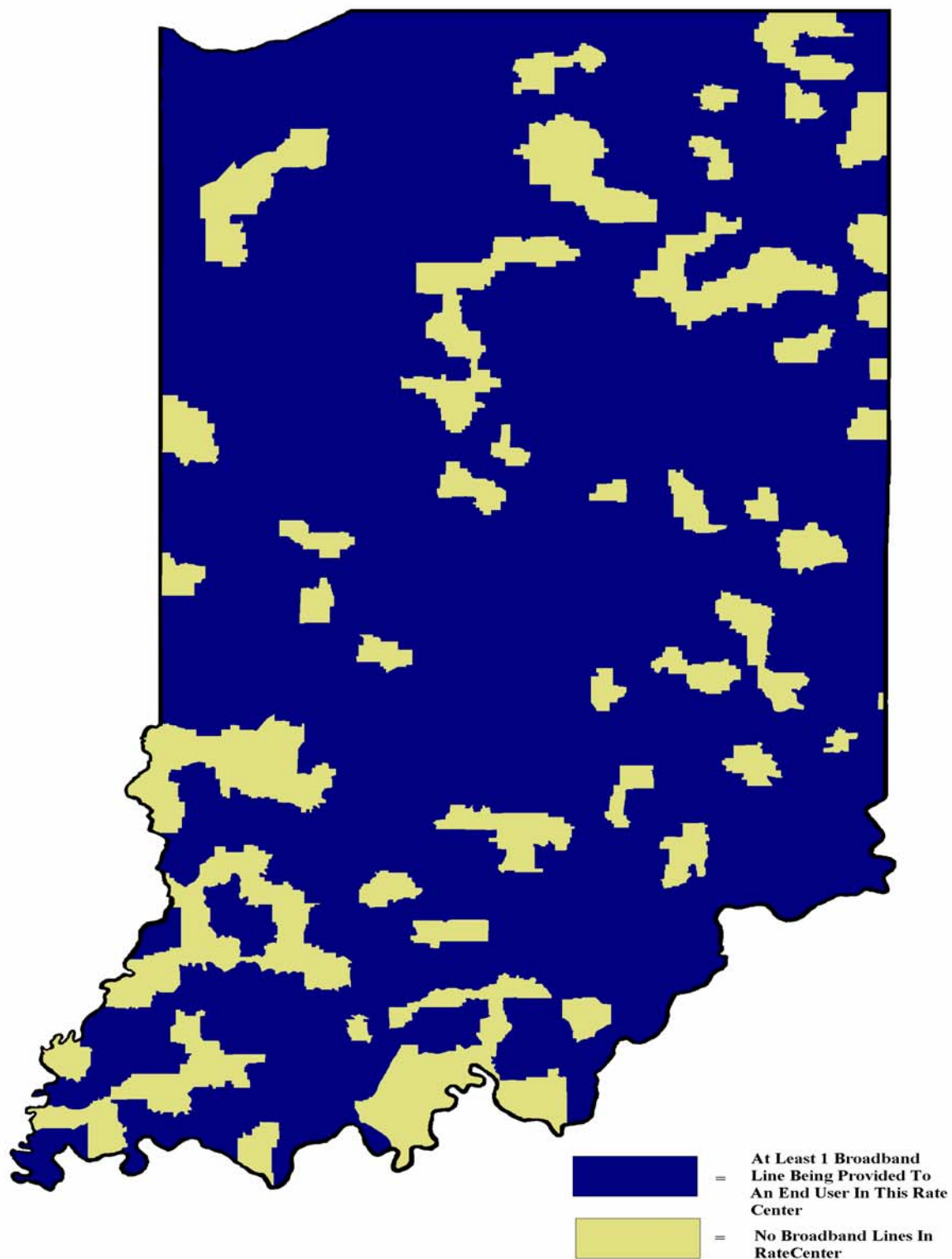
²² Beyond deployment telephone companies are now reducing the price. For example, SBC is offering DSL for \$14.95 a month.

²³ Our survey does not cover cable, wireless, satellite, or BPL.

Map 2

**Indiana Rate Centers Where Local
Telephone Service Providers Are
Providing At Least 1 Broadband Line**

As of 12/31/2004



4. Broadband Over Power Lines

Broadband over Power Lines (BPL) in our view continues to be an important technology as a first option for broadband deployment for some rural communities and a viable second or third option for suburban or metropolitan communities.²⁴ Last year the IURC reported Cinergy, partnering with Current Technologies, had a trial of BPL in Cincinnati, and planned to offer it in Indiana. We also knew of a municipal energy company who was in the initial stages of testing BPL, but did not have a timetable for rollout. This year we can update the progress of BPL in Indiana to report on two successful trials. Data from the National Association of Regulatory Utility Commissioners (NARUC) shows that we are one of a few states with two active BPL trials.

South Central Indiana REMC (SCI) in Martinsville, IN was the first utility in Indiana to pilot BPL and the second rural deployment in the country. Today, they have about 100 customers connected to the BPL system and plan to cut the trial off at 200 customers. SCI is charging \$29.95 and guaranteeing 250 kps bandwidth. Reports from the utility indicate the system is working well. Further roll-out will depend on the success of new equipment, and additional funding. International Broadband Electric Communications, Inc., who has partnered with SCI, has applied for a low interest Rural Utility Service loan to help cover the cost of the equipment and SCI received a \$200,000 Department of Commerce grant to help offset installation costs.

Lebanon Utilities has been developing BPL and is currently running a technical trial. It expects full deployment in 2005 and anticipates over 1000 customers the first year. Reports from the utility indicate everyone is satisfied with service using first generation equipment, which provides 500 kps to up to 1 MG bandwidth. The utility will deploy second generation soon. Unlike SCI, the utility is using internal funding and does not have a partner. The town of Lebanon has other broadband suppliers, but Lebanon Utilities expects to be competitive with these suppliers.

With all three types of electrical power suppliers – investor-owned, municipality, and cooperative -- experimenting with BPL close to Indiana or within the state, we are optimistic Indiana will become a growth area for BPL.

5. Satellite Options

Service providers such as DirecTV, WildBlue and Direcway market satellite-based connections to consumers with a view of the southern sky. Newer companies such as Quantum Connections also help arrange service in northeastern parts of the state using Internet Satellite Platform, Inc. ("ISAT"). A number of R.E.M.C.s and Rural ILECs across Indiana will be providing broadband service via satellite service from WildBlue starting in the late summer/early fall timeframe. Being a customer of the R.E.M.C. or ILEC is not a requirement for subscribership. The monthly cost for the service is as low as \$49.95 with speeds up to 1.5 Mbps.²⁵

Applications of Broadband Continue to Expand

The deployment of broadband would mean very little if there were not applications for the technology. Large corporations, at the present time, use broadband connections to transfer large amounts of data quickly; however, residential and small business customers do not have this requirement. Voice over Internet Protocol (VoIP) and Video over Internet Protocol (Video over IP) will likely fuel the desire of residential and small businesses customers to use

²⁴ While not a part of this discussion, BPL has other benefits such as greater monitoring of the electric grid.

²⁵ Installation and equipment fees are separate.

broadband services.²⁶ The introduction of both Video and Voice over IP has the potential to revolutionize the telecommunications and entertainment industry in this country.

1. Voice Over Internet Protocol (VoIP)

VoIP has the attention of the entire industry and is having the largest disruptive effect on the industry since AT&T was split up and the Regional Bell Operating Companies were created. VoIP is based on Packet switching instead of Circuit switching. Packet Switching, a method by which a "conversation" (voice, video, data, etc.) is sliced into small digital packets with a unique identification, is showing great promise as an efficient, low cost method to provide telecommunications services. This technology depends much more on the intelligence of the equipment connected to the network (e.g., computers and routers) than the traditional telephone network, which is based on centralized control and routing.

VoIP services offer a longer term cost advantage over traditional circuit switch technology, because IP uses a single, more efficient connection to users. VoIP also has the potential to offer a richer set of features and functionality not possible with traditional networks. In the last year, many in the industry have moved beyond the trial phases of offering this service. Today companies like Skype, Vonage, Yahoo, AOL, SBC, and Verizon offer VoIP.

2. Video over Internet Protocol

Video over IP is yet another use of broadband. Here, movies and TV programming are sent to homes and businesses via the Internet in the similar manner as voice. SBC has partnered with Microsoft to provide this video over fiber. SBC is committing \$400 million over 10 years to enter this market in direct competition with the cable companies. Verizon is also entering the market through their FiOS networks. These two efforts promise to not only provide the same features as the cable companies, but will include features that cable companies cannot provide, like unlimited and anytime movie selection and video games that are controlled from the home.²⁷

²⁶ According to the FCC, broadband service in Indiana has increased by 119% from June 2003 to June 2004, to 519,514 lines.

²⁷ Franchising requirements are becoming a critical issue with Video over IP.

3.0 Rural ILECs Continue to Evolve

Rural Incumbent Local Exchange Carriers (RLECs) serve an important role in Indiana. While the three major ILECs serve the bulk of access lines, RLECs serve many communities that would otherwise not have telephone service.²⁸ Besides providing general statistics regarding RLECs, we report on the status of the implementation of the state's universal service fund and changing requirements of Eligible Telecommunications Carriers (ETCs).

General Statistics of Rural Incumbent Local Exchange Carriers

Appendix 1 contains a spreadsheet listing all the RLECs, the number of access lines, whether they are exempt from Commission jurisdiction, whether they have a CLEC affiliate, whether they have a toll affiliate, and whether they are part of a holding company. Indiana has 37 RLECs. Together these carriers serve 162,832 access lines based on our 2004 Local Competition Survey. While they all serve rural territories and are classified as a Rural Telephone Company per the Telecommunications Act of 1996, the differences in the companies are important to consider. There is a broad range in the number of access lines served by these carriers. Ranging from 484 access lines to 31,970 access line, six companies serve fewer than 1,000 access lines, four companies serve more than 10,000 access lines, while the rest fall somewhere in the middle. Other differences include the fact that seven are cooperatives, 13 are subsidiaries of one of three large holding companies, and 18 have withdrawn from the jurisdiction of the Commission.

RLECs Continue to Diversify

RLECs are continuing to leave the Commission's jurisdiction at a rate of about two every year. Currently, eighteen RLECs have withdrawn and two more companies have a case pending to withdraw from IURC jurisdiction. All seven cooperatives had withdrawn by 1996 under authority granted in Indiana Code 8-1-17-22.5 (passed in 1983). The rest of the companies have withdrawn or are requesting to withdraw under the authority granted in Indiana Code 8-1-2-88.5 (passed in 1998) which allows telephone companies, other than cooperatives, to petition the Commission to withdraw from its jurisdiction over rates, charges and financing. The two most recent cases are Smithville Telephone Company and Yeoman Telephone Company. In requesting to leave the Commission's jurisdiction, Smithville signed a Settlement Agreement with the OUCC. In the Settlement Agreement, Smithville agreed to install new generators in five important locations and to have a plan to upgrade its pedestals. Yeoman requested an increase in its rates and charges as well as an exemption from the Commission's jurisdiction. In its Petition, Yeoman stated that if the Commission granted its requested exemption Yeoman would continue to file tariffs for rates and charges and subsequent changes for informational purposes as well as continue to pay the Public Utility Fee and file the Commission Annual Report. In the Order, the Commission approved Yeoman's request for exemption under I.C. 8-1-2-88.5, while denying their request to increase rates and charges. The Commission order stated that Yeoman is free to set its own rates pursuant to I.C. 8-1-2-88.5.

To seek new sources of revenue, many rural companies have established subsidiaries offering local, long distance, wireless and high speed Internet service within their ILEC boundaries and beyond their designated ILEC boundaries. In fact, twenty (54%) of Indiana's rural ILECs have authority or an affiliate with authority to provide local exchange service in territories other than

²⁸ In the early 20th century AT&T would not serve many rural communities.

their existing ILEC territory.²⁹ At least 16 (43%) have authority or an affiliate with authority to resell toll service and 18 (49%) are affiliated with a wireless carrier. Many also have affiliates that are internet service providers. All but seven of these companies (81%) provide broadband service to a large number of their customers. It is evident that these small companies are positioning themselves to survive in the constantly changing, increasingly competitive environment of the telecommunications industry of today and tomorrow.

RLECs Depend on Universal Service Funding

RLECs face some challenges that differ from those of larger carriers, most important of which is maintaining universal service funding. Rural companies have for many years relied heavily on funds received from the Federal Universal Service High Cost Fund as well as two state funds, the Indiana High Cost Fund and the Transitional DEM Weighting Fund, to serve customers in high cost areas at rates comparable to those paid in urban areas. Qualification for much of this support is based on the RLEC's regulated services and does not take into account revenues from many of its new lesser regulated businesses such as long-distance toll, wireless, internet service provider, or other broadband services.

On March 17, 2004, the IURC approved a Settlement Agreement under Cause No. 42144 which established a state universal service fund for Indiana (IUSF), consistent with federal policy. The purpose of this fund is to provide for recovery, in part, of intrastate revenue reductions resulting from the FCC's 2001 MAG Order. Consistent with the IURC's policy of intrastate mirroring, the Settlement Agreement allows companies to recover shortfalls through the IUSF when there is a demonstrated need. IUSF shall be funded by mandatory contributions from all telecommunications carriers that provide intrastate retail telecommunications service in Indiana and those carriers will be required to pass through those administrative expenses to their customers. The Indiana High Cost Fund and the Transitional DEM Weighting Fund will be transitioned into the new state USF.

The Commission will review IUSF operations periodically, beginning before the 3-year anniversary of the first disbursement to an eligible carrier, in order to ensure that: 1) the IUSF preserves and advances universal service according to federal and state mandates; 2) the universal service continues to be made available at rates reasonably comparable to rates for similar services in urban areas; 3) the processes, funding levels, size and operation, and administration remain adequate and sufficient relative to its federal counterpart; and, 4) the operation of the IUSF, relative to its federal counterpart, is appropriate.

The Commission is currently in the process of reviewing the Request for Proposal for the selection of a fund administrator. This process should be finished by fall 2005.

²⁹ The nine TDS Telecom companies have a CLEC affiliate, TDS Metrocom, who does not compete in Indiana, but has entered other Midwestern states.

The IURC Continues to Certify Eligible Telecommunications Carriers

In order to be eligible to receive funds from the federal or state Universal Service Fund one criteria that a company must meet is that it be certified as an Eligible Telecommunications Carrier (ETC). The IURC has undertaken the designation and certification of ETCs for quite some time. In 2001 following the FCC's MAG Order, the Commission began to annually certify in Cause No. 42067 that each ETC qualified to receive Federal Universal Service support was indeed using those monies in accordance with Section 254 of the Telecommunications Act of 1996. The certification consists of an affidavit signed by a corporate officer in addition to some basic financial questions that enable the Commission to determine the manner in which the monies are being utilized. That information is certified and the FCC is then notified to disburse funds.

Traditionally, ETCs have been wireline incumbent local exchange providers. This is because an ETC designation means that the company must be a carrier of last resort. Certain responsibilities come with the ETC designation, such as providing access to emergency services and toll limitation to qualifying low-income customers. It also makes the company eligible to receive Universal Service funds from the federal government if they serve one of the rural high-cost areas of the state. To date the IURC has designated three non-wireline local exchange providers and two competitive local exchange providers as ETCs.

In March 2005, the FCC released a Report and Order applicable to all ETCs. This Order addresses the minimum requirements for a telecommunications carrier to be designated as an ETC and thus continue their eligibility to receive funding. These requirements will be adopted by the IURC prior to the annual certification deadline (October 1st) in order to improve the long-term sustainability and accountability of universal service funds.

4.0 Uncertainty in Federal Regulations

Uncertainty at the federal level affects state commissions, companies, and consumers. Here, we provide three examples: uncertainty regarding the legal and regulatory classification of cable modem broadband Internet access, which was part of a recent Supreme Court decision; uncertainty regarding intercarrier compensation and universal service; and uncertainty regarding potential efforts in Congress to either rewrite existing telecommunications statutes or to write new statutes.

Classification of Cable Modem Service

Access to the Internet is important to millions of people and is becoming more important, to more people, every day. Internet access is provided using several different technologies, including “dial-up” (basic local telephone lines) and broadband (described in Section 3.0). Intimately related to the type of broadband technology used to access the internet (usually DSL or cable modem) is the legal distinction between a “telecommunications service”³⁰ and an “information service”.³¹ This distinction can determine what types of regulations (if any) are applied to the access provider, and by whom (federal or state regulators). Classification of a service as a “telecommunications service” means the service may be subject to more, or different, regulation than if that service is classified as an “information service.”

The FCC has classified both DSL and cable modems. In February 2002, the FCC tentatively determined that DSL Internet access should be classified as an “information service” with a “telecommunications component” (the underlying transmission).³² In March 2002, the FCC, after issuing a Notice of Inquiry determined that “cable modem service as currently provided is an interstate information service, not a cable service, and that there is no separate telecommunications service offering to subscribers or ISPs.”³³ Through the various appeals, lower courts generally found that cable modem service was a telecommunications service.^{34,35,36} On June 27, 2005, the United States Supreme Court reversed the Ninth Circuit’s *Brand X* decision by a 6 – 3 margin, holding that the appeals court did not grant sufficient deference to the FCC’s interpretation of the federal statutes as classifying cable modem service as an information service, rather than a telecommunications service.³⁷ The Supreme Court also remanded the case for further action, consistent with its ruling. By classifying broadband cable modem service as an information service, rather than a telecommunications service, the FCC was effectively exempting broadband cable modem service from at least some mandatory common carriage regulations. On August 5, 2005, in response to the *Brand X* decision, the FCC “determined that wireline broadband Internet access services [typically delivered using

³⁰ 47 U.S.C. §153(46).

³¹ 47 U.S.C. §153(20).

³² *In the Matter of Appropriate Framework for Broadband Access to the Internet Over Wireline Facilities*, CC Docket No. 02-33, Notice of Proposed Rulemaking, Sect. II., para. 17 (FCC 02-42 Rel. Feb. 15, 2002).

³³ *In the Matter of Inquiry Concerning High-Speed Access to the Internet Over Cable and Other Facilities*, GN Docket No. 00-185, and *In the Matter of Appropriate Regulatory Treatment for Broadband Access to the Internet Over Cable Facilities*, CS Docket No. 02-52, Declaratory Ruling and Notice of Proposed Rulemaking, para. 33 (FCC 02-77 Rel. March 15, 2002).

³⁴ *Mediagroup, Inc. v. County of Henrico*, 97 F.Supp. 2d 712, 714-715 (E.D. Vir. 2000), *aff’d*, 254 F.3d 356 (4th Cir. 2001). See also *Gulf Power Co. v. FCC*, 208 F.3d 1263, 1277 (11th Cir. 2000), *rev’d*, 534 U.S. 327 (2002) (holding that the FCC could not regulate pole attachments for internet services because they did not qualify as telecommunications services).

³⁵ *AT&T v. City of Portland*, Sect. II.B. (9th Cir. 2000).

³⁶ *Brand X Internet Services v. FCC*, Consol. Case Nos. 02-70518, 02-70684, 02-70685, 02-70686, 02-70689, 02-71425, and 02-72251; Section II.C. (9th Cir. 2003).

³⁷ *In the Matter of Nat’l Cable & Telecom. Assoc. et al. v. Brand X Internet Services et al.*, No. 04-277 (U.S. S. Ct. June 27, 2005).

DSL technology] are defined as information services functionally integrated with a telecommunications component. In the past, the Commission [FCC] required facilities-based providers to offer that wireline broadband transmission component separately from their Internet service as a stand-alone service on a common-carrier basis, and thus classified that component as a telecommunications service.”³⁸ In its August 5 decision, the FCC eliminated this transmission component sharing requirement.

Implications

While we are not reaching any legal conclusions, it appears that the Supreme Court’s reversing of the Ninth Circuit Court and upholding of the FCC could have important implications, such as:

1. It may expand the degree of deference courts give to the FCC’s interpretations of the Communications Act;
2. It may limit the application of “Title II” common carriage regulation to broadband cable modem service providers;
3. It may affect deliberations on the extent (if at all) to which cable modem providers are required to pay into the federal USF support mechanisms. The resolution of this issue, in turn, can have an effect on the amount that other types of providers are required to pay;
4. It may affect deliberations on the extent (if at all) to which “open access” or “mandatory access” requirements for application, service, and/or content providers should be placed upon cable broadband network owners and providers;
5. It may help clarify the options available to Congress as it considers rewriting existing federal communications statutes or writing new statutes, which is discussed below.

Intercarrier Compensation

Intercarrier compensation is an issue of deep contention at both national and state levels. Intercarrier compensation includes access charges paid by long distance providers to ILECs, access charges paid by wireless carriers to ILECs, and reciprocal compensation for exchange of local traffic between ILEC and CLEC. Changes to intercarrier compensation may impact rate payers through a change in the Subscriber Line Charge (SLC). Currently, the debate has come to a crossroads as industry stakeholders and state commissions through the National Association of Regulatory Utility Commissioners (NARUC) develop solutions for the open proceeding at the Federal Communications Commission (FCC). The IURC has been actively engaged with the NARUC “Task Force” process since its inception and has participated in developing a comprehensive proposal to address these complex issues.

At the express request of many of the stakeholders who had been participating in workshops, state Commissioners and staff developed a “strawman” proposal for discussion within the Task Force. The strawman proposal then became the basis for further discussion and development within the Task Force throughout the late fall and winter of 2004. The continuous process of refinement has enabled the Task Force to reach compromises on the issues it presented to the

³⁸ *Re: Appropriate Framework for Broadband Access to the Internet over Wireline Facilities, Universal Service Obligations of Broadband Providers*, CC Docket No. 02-33, Report and Order (FCC 05-150: adopted August 5, 2005). As of August 26, 2005, the FCC had not yet released the order in this proceeding. We must rely primarily upon the FCC’s News Release in describing to the FCC’s actions: “FCC Eliminates Mandated Sharing Requirement on Incumbents’ Wireline Broadband Internet Access Services” (News Release: August 5, 2005). We await the release of the order to learn specific details of what the FCC has adopted.

FCC. While the Task Force process is a model for dealing with complex regulatory issues, it is also reflective of the tremendous amount of work done by those whose plans came before the Task Force. It is on their shoulders that the Task Force was able to stand and explore options through a process of education, compromise and balance. On May 18, 2005, the Task Force filed Version VII of its intercarrier compensation plan with the FCC. While the IURC has indeed been involved in this process, it has not formally taken an independent position to date regarding the potential impact of such reform on incumbent carriers operating within the state.

Legislative Re-Write of the Telecommunications Act of 1996

NARUC is actively preparing for the much discussed legislative initiative to re-write the Telecommunications Act of 1996. As a state member, the IURC has been engaged in such measures over the last 12 months. Key commissioners and staff have been charged with identifying and analyzing specific issues that are ripe for reconsideration in light in recent federal activities including the FCC's Triennial Review for Unbundled Network Elements.

Congress is also showing signs of gearing up for a re-draft of TA-96 by holding some preliminary hearings on this subject matter. These hearings have included topics such as the burgeoning IP environment, state versus federal jurisdiction, the focus on broadband deployment nation-wide, and consumer protection during the emergence of mega telecommunications mergers and their requisite impact on states. Throughout these hearings, several key deliberations between legislative representatives and members of NARUC have occurred to further examine these issues and determine the best course of action for reforming our national telecommunications laws. NARUC believes that any such efforts toward reform should provide all relevant levels of government flexibility to relax and, when appropriate, restore its regulation in response to evolving market circumstances.

5.0 Consumer Issues are at the Forefront of IURC Activities

Consumer issues will always be at the forefront of IURC activities. Among the most important consumer issues are increasing awareness and ensuring compliance with the Lifeline/Link-up program (a federal program which subsidizes phone charges for qualifying low income households); numbering issues such as 911, 811, and 211; and resolving the many and varied complaints submitted to our Consumer Affairs Division.

Low-Income Indiana Residents Can Obtain Affordable Telephone Services

Low-income residents who meet certain criteria are eligible to receive basic local telephone service and the cost of initial hookup at reduced rates through a federal program called Lifeline/Link-Up.³⁹ This program helps low-income consumers obtain phone service and stay connected to the public switched telephone network with reduced rates. The local exchange carriers that provide Lifeline/Link-Up services are reimbursed by the federal government through a dedicated portion of universal service funds specifically earmarked for low-income consumers. The IURC determines which companies are eligible to provide this service by ensuring that the companies are designated as Eligible Telecommunications Carriers (ETCs).

An FCC analysis of state's Lifeline programs found Indiana's percentage of households that took Lifeline in 2002 was 13.0%, well below the national average of 33.7%.⁴⁰ In 2004, the FCC released an Order expanding their Lifeline/Link-Up eligibility criteria to reach more consumers.⁴¹ Previously, households enrolled in Medicaid, Food Stamps, Supplemental Social Security Income, Federal Public Housing Assistance, or the Low Income Heat and Energy Assistance Program (LIHEAP) also qualified for Lifeline/Link-Up. The FCC added Temporary Assistance to Needy Families (TANF), the National School Lunch (NSL) program, and households at or below 135% of the federal poverty guidelines as qualifiers for the Lifeline/Link-Up program. Outreach guidelines were also established encouraging states and carriers to target their outreach efforts towards those most likely to qualify for Lifeline/Link-Up.

On July 28, 2005, the IURC issued an Order in Cause No. 42144-S1, an investigation reviewing the Lifeline/Linkup program in Indiana. Currently, Indiana is a federal default state and implements the federal standards for the Lifeline/Linkup program. The testimony in the case showed that Indiana's telephone penetration rates are lower than the national average and have actually decreased in recent years. The testimony also revealed the fact that a majority of Eligible Telecommunications Carriers (ETCs) in the state do not have participation rate data that matches their service areas. The Commission recognized that while the current level of telephone penetration needs improvement, procedures must first be in place to allow for the effective measurement of future improvement. The Commission found that rather than establishing a lifeline fund to increase penetration rates at this time, ETCs should first have the opportunity to fully evaluate the current level of effectiveness of the Lifeline/Link-Up programs in their service areas and then make any necessary improvements. The Commission agreed that improving ETC's outreach efforts should improve customer participation in the programs and

³⁹ Lifeline assistance provides up to \$10.00 off the monthly cost of telephone service for a single telephone line in their principal residence. Link-Up provides discounts on service charges associated with initiation of service of up to 50% with a maximum benefit of \$30.

⁴⁰ *Life Line Staff Analysis, Qualifying the effects of adding an income criterion to the Lifeline eligibility criteria, A Study for the Federal-State Joint Board on Universal Service*, Craig Stroup, Federal Communications Commission, April 29, 2004.

⁴¹ *In the Matter of Lifeline/Link-Up* WC Docket No. 03-109 (Released April 29, 2004).

directed ETCs to utilize the outreach guidelines contained in the FCC's Lifeline Order. The Commission found that these efforts shall be carried out in conjunction with the adoption of the three new federal eligibility criteria in addition to educational outreach guidelines contained in the FCC's Lifeline order. The IURC found that Indiana ETCs should submit, one year after the implementation of the FCC's Lifeline order, information on the total number of households to which they are providing Lifeline/Link-Up service as well as comparisons to prior years. ETC's were also directed to implement the FCC's new program-based and income-based eligibility criteria.

The IURC staff through its participation in the Telecommunications Consumer Education Committee (Committee) is endeavoring to increase awareness of the Lifeline/Link-Up programs in order to connect more Indiana customers to the telecommunications network.⁴² The Telecommunications Consumer Education Committee was created as part of the Alternative Regulatory Plans (ARPs) for Verizon and SBC. The Committee is charged with the responsibility of utilizing the funds, which were committed by the companies under the ARPs, in a cost-effective manner that will maximize the Committee's ability to distribute information on relevant telecommunications consumer topics. The Committee has decided to focus its energies for the year 2005 on Lifeline/Link-Up education and has undertaken a comprehensive campaign aimed at improving consumer awareness and understanding of the Lifeline/Link-Up programs.

Conserving Telephone Numbers Remains Critical to Avoid Area Code Splits

Consumers are also affected by state and federal number conservation policies. Three-digit area codes and seven-digit telephone numbers are finite resources which are in heavy demand. The increase in telecommunications providers, growth in wireless customers, the use of fax machines, and now Internet based phone systems, places pressure on numbering resources. When numbers are exhausted in a particular area code, the IURC must implement area code splits or ten-digit dialing. Fortunately, through industry cooperation and number conservation efforts, the pressure to split area codes has eased. The current status of numbering resources for Indiana's six area codes is reflected in the following table:

Table 2: Area Code Life Projections

Area Code	Year & Quarter of Projected Number Exhaust
219	2019 2Q
260	2020 2Q
317	2011 3Q
574	2025 3Q
765	2010 2Q
812	2008 2Q

As Table 2 indicates the earliest projection for area code exhaust is second quarter 2008 for the 812 Area Code. However, the above projections could rapidly change. There is uncertainty and concern regarding future federal policies on the commercial roll-out of Voice over Internet Protocol (VoIP) and its impact on existing numbering resources. Currently, several petitions filed by providers of VoIP services are being considered by the FCC. These VoIP providers are

⁴² The Committee is comprised of representatives from the IURC staff, staff from the Office of Utility Consumer Counselor, and representatives of SBC and Verizon.

requesting the waiver of the rule requiring that telecommunications carriers provide, as part of their applications for initial numbering resources, evidence demonstrating that they are authorized to provide service in the area in which they are seeking those resources. A ruling in favor of these petitioners would allow them to obtain numbering resources upon request directly from the North American Numbering Plan Administrator (NANPA).

The rule for which these providers are requesting a waiver gives state commissions the authority to “certify” which carriers are allowed to obtain numbers in their region as well as providing the states with the ability to protect and conserve the telephone numbers available in their state. Without this kind of certification or registration mechanism, which is required of all other telecommunications carriers wanting to obtain telephone numbers from the NANPA, a state commission’s ability to monitor and control the efficient allocation and utilization of available numbering resources within its jurisdiction and prevent unnecessary area code splits is severely hindered.

In August 2004, the IURC filed reply comments in response to the FCC’s Public Notice regarding SBC IP Communications, Inc.’s request for waiver from Section 52.15(g)(2) of the FCC’s numbering rules. We agreed with several state commissions (Iowa, Ohio, and Pennsylvania) that granting this waiver would have allowed SBC IP to obtain numbering resources directly from the NANPA thereby frustrating state commission’s efforts to monitor numbering resource allocation.

Emergency Access Numbers Continue to Expand

IURC staff must stay current on coordination efforts for special three-digit numbers used to give consumers quick access to emergency services or vital information services and assure that telecommunications carriers offering service in the state do their part in implementing these systems.

Availability of E-911 Continues to Increase in Indiana

There are two types of 911 service provided to telecommunication consumers in this country: basic (911) and enhanced (E-911). Basic 911 connects the caller to the Public Service Answering Point (PSAP), but provides no information about the caller to emergency responders. E-911 provides the name, address and phone number of the caller to responders in case the connection is broken or the caller has trouble articulating their location. Indiana, through the vision of its legislature, has one of the best funded and operational E-911 systems in the country and all counties in Indiana, except Martin and Parke, have county-wide wireline E-911 service. Martin and Parke are scheduled to have county-wide wire line E-911 service by the end of 2005 or as soon as the address database for each county is finalized. Although the IURC is not directly responsible for the implementation of E-911, the Commission continues to monitor its architecture and implementation to ensure that our policies support the goal of E-911, regardless of technology. As part of this monitoring the Commission has opened a subdocket in Cause No. 42530, discussed in Section 1.0. The Commission will work with all interested parties to identify issues and work on resolving those issues.

Phase I and II Compliance for Wireless E-911 is Almost Completed

The mobility of wireless phones makes them an asset in emergencies, but in the absence of E-911, callers must be able to identify where they are located. Unlike wireline E-911, it is difficult for the wireless system to provide the exact location of the caller. The FCC has addressed this issue by establishing a two-phase process for wireless service providers to deploy E-911 service. Phase I requires that the system locate the caller by identifying the cell tower closest to

the caller. Phase II requires the system to locate the caller to within either a 50 foot or 100 foot radius depending on the technology used. The FCC established the deadline of April 2000 for the implementation of Phase I and December 2005 for Phase II. These deadlines only apply for localities that are E-911 capable. Maps 3 and 4 on the next two pages show Phases I and II status for the Indiana counties. As indicated above, Map 3 shows only two counties, Parke and Martin, that are not Phase I compliant. Twelve counties have completed Phase II since last year, but Map 4 indicates nine counties that are not Phase II compliant. These counties include Pulaski, Benton, Randolph, Parke, Owen, Brown, Martin, Washington, and Floyd.

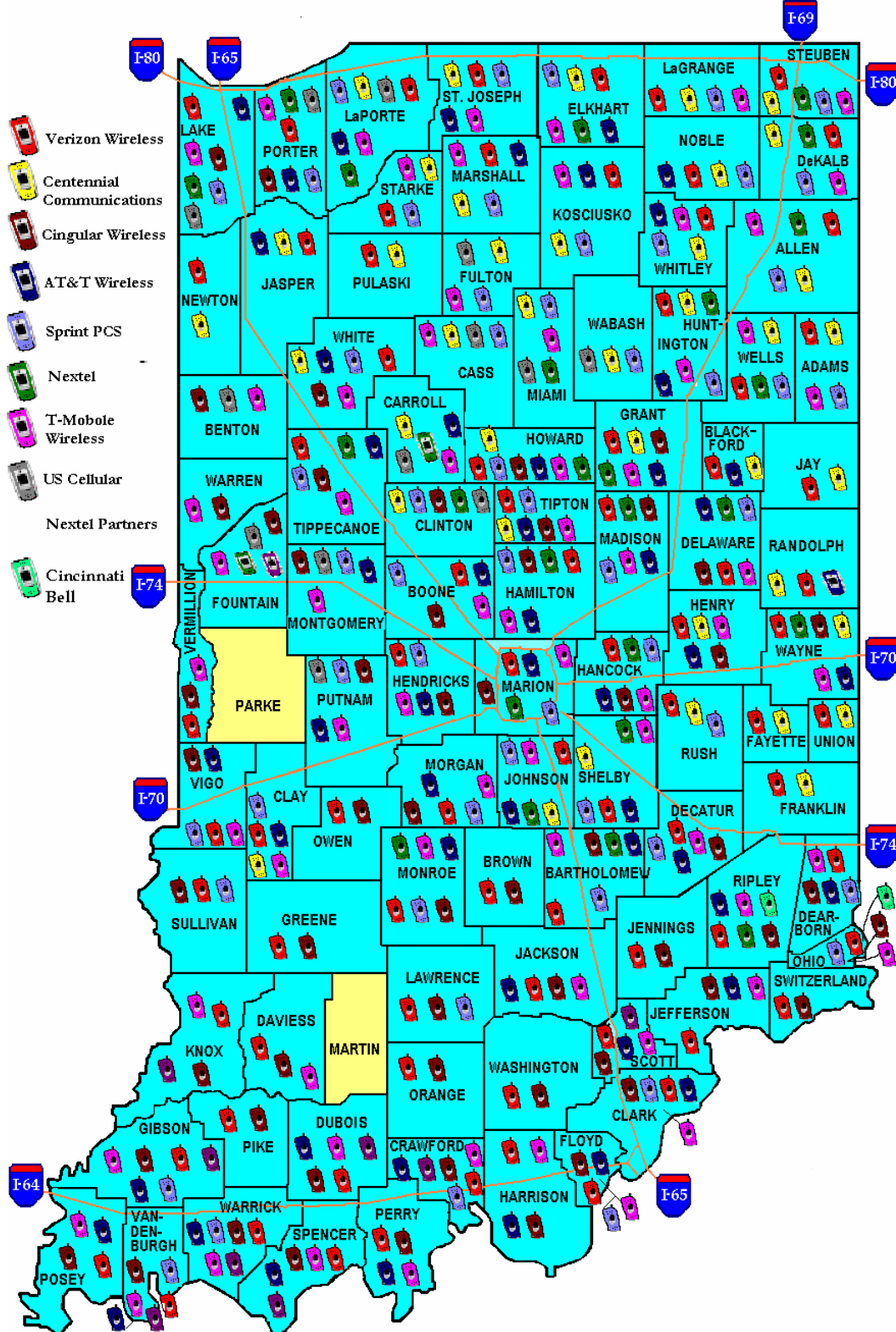
As the number of wireless phones increase, a strain is being put on the public safety-911 answering points. Wireless providers must be required to comply with all E-911 requirements and pay their appropriate share for this public safety service.

Emerging Technologies Pose Challenges to E-911

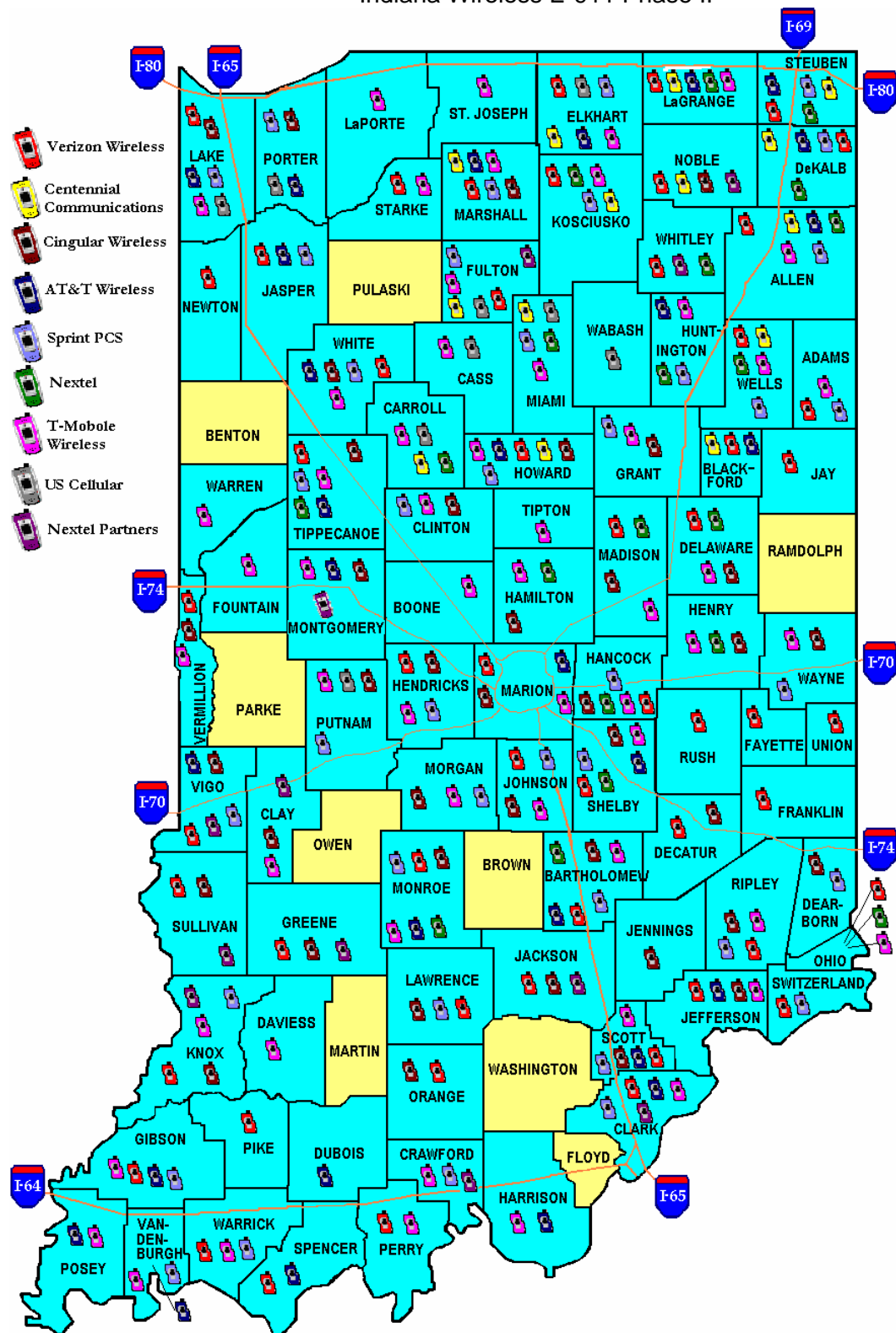
Technologies like VoIP and wireless fidelity (WiFi) appear to be ready to revolutionize the telecommunications industry, but they also pose challenges to the 911 system. These technologies are similar to wireless in that they can be mobile, yet are even more challenging for E-911 implementation because there are no fixed points in the systems like cell towers or GPS to help locate where the 911 call originated. The IP phone industry is working on solutions to the problem of locating mobile IP phones and the FCC is generating guidelines and schedules to expedite these solutions. On June 3, 2005, the FCC released an Order⁴³ stating that interconnected VoIP services are not exempt from liability under state laws regarding E-911 service requirements. The FCC defines the term interconnected to the "ability of the user generally to receive calls from and terminate calls to the public switched telephone network." The Order requires all interconnected VoIP providers to transmit all 911 calls, as well as a call back number and the caller's "registered location" to the appropriate PSAP. At the present time, since these systems can be mobile, the VoIP customer will be responsible for keeping his/her location registration up to date. The industry is working on ways to provide this information to the PSAPs without the consumers input. However, current 911 laws established by the Indiana legislature to fund 911 services were not specifically designed to address E-911 for interconnected VoIP providers. As more people change to these new forms of communications, funding for 911 services will become critical.

⁴³ *In the Matter of IP-Enabled Service, E-911 Requirements for IP Enabled Service Providers* WC Docket No. 04-36 & WC Docket No. 05-196 (Released June 3, 2005).

Map 3
Indiana Wireless E-911 Phase I



Map 4
Indiana Wireless E-911 Phase II



Special Three-Digit Numbers Continue to be Developed

811 is the National Dialing Code For Pipeline Safety

In March 2005 the FCC designated “811” as the national toll-free abbreviated dialing code to be used by state “One Call” notification systems.⁴⁴ These systems are designed for providing advanced notice of excavation activities to underground facility operators in compliance with the Pipeline Safety Improvement Act of 2002. The effective date for using 811 was May 13, 2005. By providing adequate advance notice to utilities with underground facilities of any excavation plans, the utility is provided ample time to properly identify and mark the location of their facilities prior to excavation activity thus avoiding pipeline ruptures, telecommunication cable breaks, disruption of electric power, etc. Authority was delegated to the states pursuant to section 251(e) of the Telecommunications Act of 1996 to address all technical and operational issues associated with the implementation of the 811 dialing code.

The 211 Referral to Social Service Agencies is Continuing to Expand in Indiana

The goal of the Indiana 211 Partnership is to create a statewide, seamless network of information and referral services accessible by residents of the state that will provide quick referrals to human service organizations. The Indiana 211 Partnership, Inc. was formed in 2000 as an Indiana nonprofit corporation whose stated purpose is:

To plan for, implement, and oversee a telephone based information and referral system in Indiana through the use of the 211 dialing code, so that people in Indiana in need of human services have quick referrals to those who provide them. Data is collected to assist communities in assessing need and allocating resources.⁴⁵

On October 9, 2001, the Indiana 211 Partnership, Inc. filed a petition under Cause No. 42098 requesting that the Commission recognize and endorse it as the proper and sole party authorized to utilize the 211 dialing code within the state of Indiana. Preliminary authority was granted on February 2, 2002.

In preparation for anticipated federal and/or state funding, the Indiana General Assembly passed HEA 1344 (P.L.60), which became effective July 1, 2004. HEA 1344 creates an account within state government to be administered by the IURC. On June 14, 2004, the IURC issued an Order recognizing the 211 Partnership as the only authorized administrator and user of the 211 code in the state of Indiana. The account is currently dormant and all 211 funding is private.

As of February 11, 2005, “211” service is now available to over 3.2 million Indiana residents, 52% of the state’s population. Current plans call for the service to be made available to an additional 1.6 million Hoosiers, another 25% of the state’s population within the near future.

⁴⁴ *In the Matter of The Use of N11 Codes and other Abbreviated Dialing Arrangements*, CC Docket No. 92-105 (Released March 14, 2005).

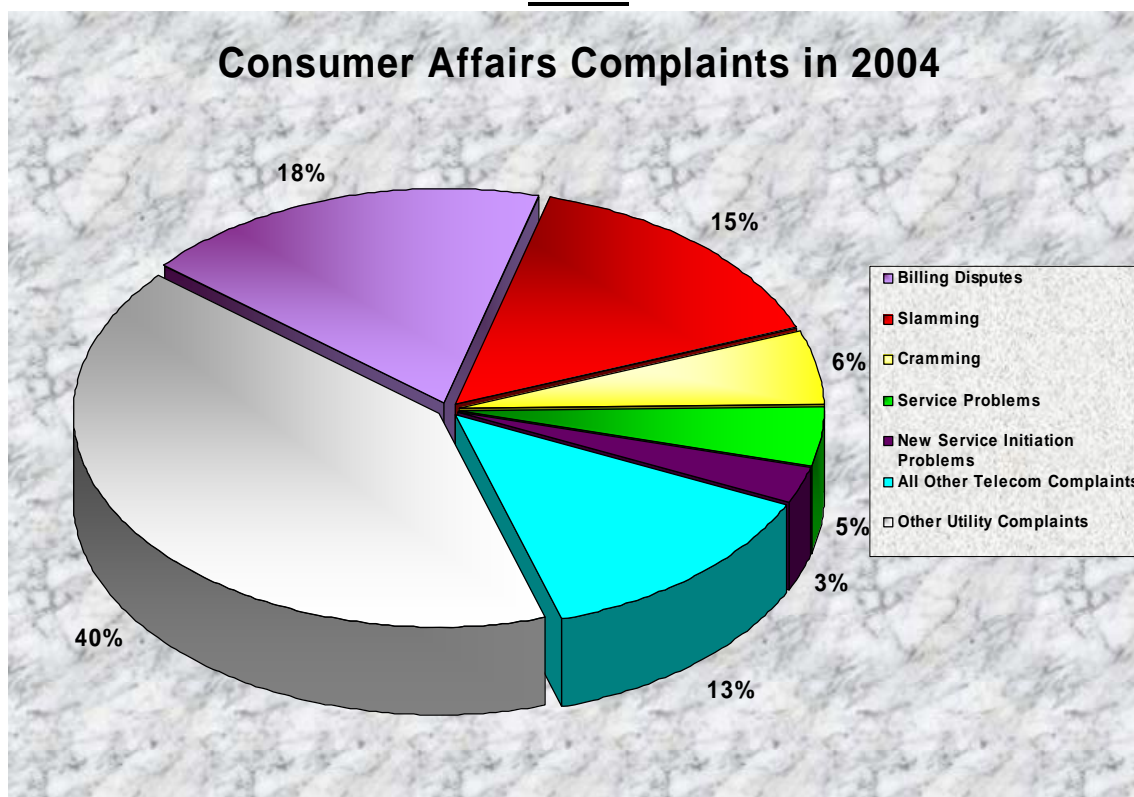
⁴⁵ *Report to the Indiana Utility Regulatory Commission*. Indiana 211 Partnership, Inc. 4/22/05

Telecommunications Complaints Filed With the IURC Consumer Affairs Division

The IURC has a Consumer Affairs staff of seven that spends a significant amount of their time on telecommunications complaints. In 2004, as Chart 5 shows, 60 percent (over 3000) of all utility consumer complaints received by the IURC were related to telecommunications. The Telecommunications Division assists Consumer Affairs when complaints become difficult to define or highly technical. Consumer Affairs is a primary implementer of telecommunications policies and rules, therefore it is essential that the Telecommunications Division and Consumer Affairs Division support each other.

The top five categories of telecommunications complaints in 2004 were: 1) Billing Disputes; 2) Slamming (unauthorized switching of telecommunications providers); 3) Cramming (unauthorized fees or charges added to consumer's bills); 4) Service Problems; and 5) New Service Installation Problems. Consumer Affairs facilitated the return of \$565,333 in adjustments to Indiana telecommunications consumers in 2004.

Chart 5



The Consumer Affairs Division Mediates Disputes Between Customers and Utilities

The IURC Consumer Affairs Division serves the important function of mediating disputes between carriers and customers. When a customer contacts the Consumer Affairs Division regarding a disputed bill and/or disconnection notice, Consumer Affairs contacts the utility in question to discuss the customer's dispute. Per 170 IAC 7-1.3-9 a utility cannot disconnect the customer's service unless the dispute has been resolved and the utility's billing has been deemed correct. This balances the dispute resolution process and helps the customer avoid

acquiescing to charges they think are erroneous simply to avert disconnection of their telephone service.

Per 170 IAC 7-1.3-11 a customer's local service cannot be disconnected for failure to pay for long distance charges or other unregulated services, such as caller ID, as long as they continue to pay their basic local service charges. However, the unregulated service could be discontinued and the customer's credit rating could be affected.

Acknowledgments

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<u>Telecommunications Division</u>	<u>Other Divisions</u>
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<i>Pam Taber</i> <i>Assistant Director</i>	<i>Ja-Deen Johnson</i> <i>Director of Consumer Affairs</i>
<i>Jennifer Richardson</i> <i>Assistant Director – Federal Affairs</i>	<i>Mary Beth Fisher</i> <i>Director of Public Information</i>
<i>Karl Henry</i> <i>Federal Affairs Specialist</i>	
<i>Mark Bragdon</i> <i>Principal Telecommunications Analyst</i>	<u>Departed Staff</u>
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<i>Brian Mahern</i> <i>Principal Telecommunications Analyst</i>	<i>Rich Higgins</i>
<i>Kevin Sosbe</i> <i>Principal Telecommunications Analyst</i>	<i>Stephanie Singleton</i>

Appendix 1: Rural ILEC Profile

Company	2004 Access Lines	Coop	Exempt from IURC Regulation	CLEC Subsidiary/Affiliate	Toll subsidiary/affiliate	Affiliated with Holding Company
Bloomington Home Tel. Co.	616					
Camden Telephone Co.	1,781		5/22/2002			TDS Telecom
CenturyTel of Central IN, Inc.	3,802			CenturyTel Fiber Co. II		Century Tel
CenturyTel of Odon, Inc.	1,987			CenturyTel Fiber Co. II		Century Tel
Citizens Telephone Corp.	2,511			Indigital	IFN	
Clay County Rural Tel. Coop. Inc.	13,495	X	5/13/1996	Clay County Rural Tele.*	IFN, Clay County Rural Tele.*	
Communications Corp. of Indiana	11,193					TDS Telecom
Communications Corp. of Southern IN	1,924		5/22/2002			TDS Telecom
Craigville Telephone Co. Inc.	1,389		pending	Indigital, Adams Wells	IFN	
Daviess-Martin Rural Tel. Corp.	3,888	X	5/18/1989		IFN, Daviess-Martin County RTC*	
Frontier Communications of Indiana	2,481				Frontier Comm. of America	Frontier
Frontier Communications of Thorntown Inc.	2,829				Frontier Comm. of America	Frontier
Geetingsville Telephone Co.	738		pending	Geetel	IFN, Geetel	
Hancock Telecom	8,477		6/30/1989	Hancock Communications	IFN, Hancock Communications	
Home Telephone Co. Inc.	2,295					TDS Telecom
Home Telephone of Pittsboro Inc.	2,886					TDS Telecom
Ligonier Telephone Co., Inc.	2,639			Ligtel Communications	IFN, Ligtel Communications	
Merchants & Farmers Telephone Co.	552					TDS Telecom
Monon Telephone Co. Inc.	1,717		9/4/1996		IFN	
Mulberry Coop. Telephone Co., Inc.	2,891	X	5/9/1996	Mulberry Telecom	IFN	
New Lisbon Telephone Co. Inc.	865		4/9/2003		IFN	
New Paris Telephone Inc.	2,171		6/19/02	Indigital	IFN	
Northwestern Indiana Tel. Co. Inc.	13,607			FBN Indiana, Inc.	FBN Indiana, Inc.	Northwest IN Holding Co.
Perry-Spencer Rural Tel. Coop.	6,977	X	8/11/1984	Perry-Spencer Comm. *	IFN, Perry-Spencer Comm. *	
Pulaski White Rural Tel. Co. Inc.	1,792	X	1/19/1984	Indigital	IFN	
Rochester Telephone Co. Inc.	8,261		11/20/2001	RTC Communications Corp.	RTC Communications Corp.	
S&W Telephone Co. Inc.	484					TDS Telecom
Smithville Telephone Co. Inc.	31,970		6/15/2005	Southern Hills Comm. LLC, Smithville Digital, LLC	Smithville Telecom, LLC	
Southeastern Indiana R.T.C.	4,865	X	9/12/1994	SEI Data, Inc.	SEI Data, Inc.	
Sunman Tel. Corp.	4,632		1/12/2000	Miles Comm.	IFN, Sunman Telecom. LD	
Swayzee Telephone Co. Inc.	1,146			Swayzee Telephone Co. *	IFN	
Sweetser Telephone Co. Inc.	1,876			Sweetser Telephone Co. *	IFN	
Tipton Telephone Co. Inc.	4,831					TDS Telecom
Tri-County Telephone Co. Inc.	3,525		9/22/2003		Tri-County Telephone *	TDS Telecom
Washington County Rural Tel. Coop.	3,779	X	4/13/1991	Washington County RTC *	IFN, Washington County RTC*	
West Point Tel. Company Inc.	810					
Yeoman Tel. Co. Inc.	1,150		3/30/2005		IFN, Yeoman Communications	
Total 2004 Access Lines	162,832					

* ILEC entity, not a separate affiliate, holds the CTA

List of Acronyms

<u>2.6</u>	Statute IC 8-1-2.6
<u>ARP</u>	Alternative Regulatory Plan
<u>BPL</u>	Broadband over Power Lines
<u>CLEC</u>	Competitive Local Exchange Carrier
<u>CSO</u>	Customer Specific Offering
<u>CTA</u>	Certificate of Territorial Authority
<u>DSL</u>	Digital Subscriber Line
<u>E-911</u>	Enhanced 911
<u>ETC</u>	Eligible Telecommunications Carrier
<u>FCC</u>	Federal Communications Commission
<u>FTTH or FTTP</u>	Fiber to the Home or Premise
<u>FWB</u>	Fixed Wireless Broadband
<u>ILEC</u>	Incumbent Local Exchange Carrier
<u>IP</u>	Internet Protocol
<u>IUSF</u>	Indiana Universal Service Fund
<u>LIHEAP</u>	Low Income Heat and Energy Assistance Program
<u>LNP</u>	Local Number Portability
<u>MAG</u>	Multi-Association Group
<u>NANPA</u>	North American Numbering Plan
<u>NARUC</u>	National Association of Regulatory Utility Commissioners
<u>NASUCA</u>	National Association of State Utility Consumer Advocates
<u>NSL</u>	National School Lunch
<u>PSAP</u>	Public Service Answering Point
<u>RBOC</u>	Regional Bell Operating Companies
<u>OI</u>	Opportunity Indiana
<u>RLEC</u>	Rural Local Exchange Carrier
<u>SLC</u>	Subscriber Line Charge
<u>TA-96</u>	Telecommunications Act of 1996
<u>TANF</u>	Temporary Assistance to Needy Families
<u>TELRIC</u>	Total Element Long Run Incremental Cost
<u>TIB</u>	Truth In Billing
<u>TRO</u>	Triennial Review Order
<u>TRRO</u>	Triennial Review Remand Order
<u>UNE</u>	Unbundled Network Elements
<u>UNE-L</u>	Unbundled Network Elements – Loop
<u>UNE-P</u>	Unbundled Network Elements – Platform
<u>VoIP</u>	Voice Over Internet Protocol
<u>Video over IP</u>	Video over Internet Protocol
<u>Wi-Fi</u>	Wireless Fidelity
<u>Wi-Max</u>	Wireless Microwave Access
<u>WISP</u>	Wireless Internet Service Provider